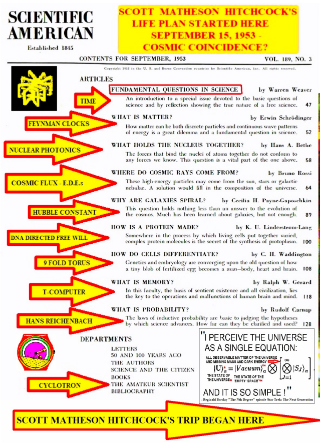
159 Days

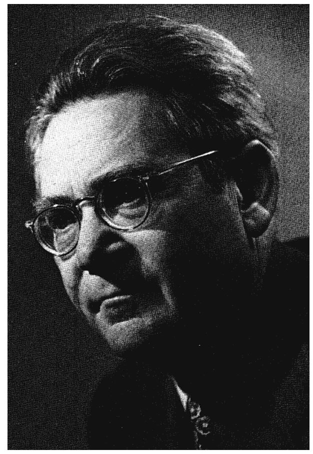

SCIENTIFIC AMERICAN
Established 1845

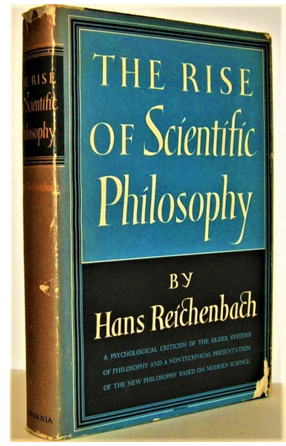
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ARTICLES

DEPARTMENTS







Ψ_1►It has been my great and very special *purpose* to have *possibly* completed one of the primary intellectual missions of HANS REICHENBACH namely his pursuit of the fundamental nature of TIME and its scientifically correct and transparent philosophical representation in our body of knowledge.

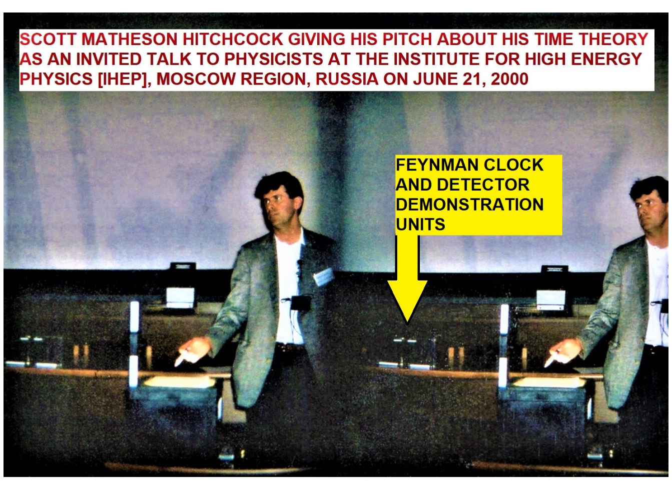
Ψ_2►A *MAGICAL THINKING* EXCURSION: This honor appears to have been given to me 159 days [at about 4 months in the womb] before my birth at his death in some sort of signal transmission from him and reception by me *through the vacuum medium* acting like a *transfer* of some *portion* or *aspect* of his 'soul' or 'spirit' [*both concepts stinking of illogical religious superstition*] via a long distance *synchronized* DNA resonance *or other unknown cosmic process* between us?

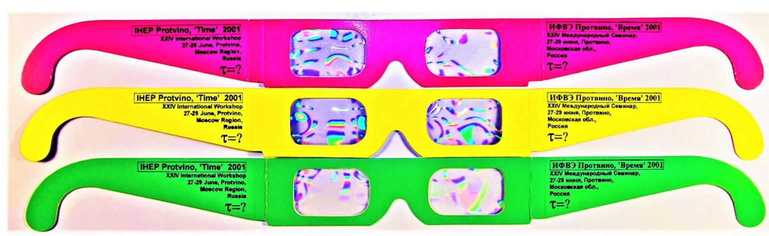
Ψ_3►I would guess *soul* and *spirit* concepts were repulsive to him by their non-scientific nature. The *meaning* of all this seems to be keeping his spirit alive in my brain in order to finish his life work on this subject which was cut short by his premature death.

Ψ_4►So, in this fantasy I put a special meaning and purpose in my world. It is my *feeling* that this is more than mere *temporal coincidence* of course this is magical thinking on my part - *a fun and colorful indulgence in my old age!*

→ SCOTT MATHESON HITCHCOCK 2024

JUST LOOK AT THE AMAZING RESULTS

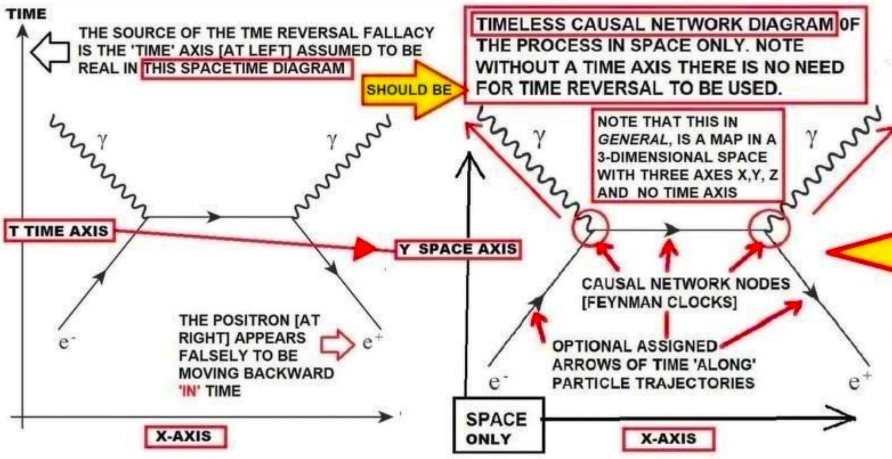




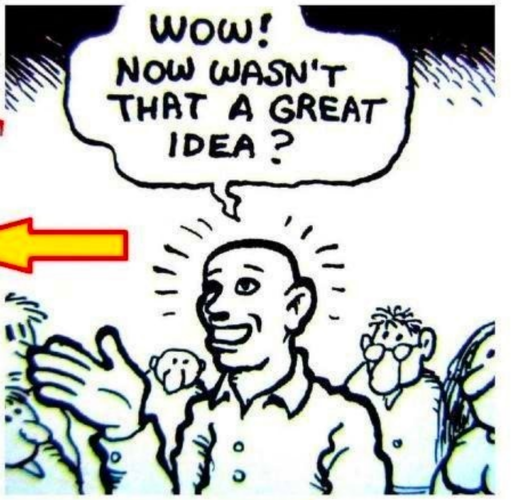


$$\tau_{S_{FC}} = \frac{\hbar}{\Gamma_{FC}} = \frac{\hbar}{|\langle 1, E_0 \mid H_{E^* \to E_0} \mid 0, E^* \rangle|^2} = \frac{\hbar}{\mathbf{I}_R}$$

$$\tau_{GUTs} = \alpha\tau_{strong} = \beta\tau_{weak} = \delta\tau_{electromagnetic} = \varepsilon\tau_{gravity}$$



WHY Feynman's Positron Time Reversal Proposal in 1949 is WRONG AND THE TIME REVERSAL & TRAVEL MYTHS are *FINALLY CLEARED UP* by SCOTT MATHESON HITCHCOCKS THEORY OF TIME



SCOTT MATHESON HITCHCOCK'S NEW THEORY OF TIME

►►►►► A SYSTEMS APPROACH GIVES US THE *SOLUTION* TO THE PROBLEM OF TIME:

FOR SIMPLE SYSTEMS, ACCORDING TO THE PRINCIPLE OF OCCAM'S RAZOR THE SIMPLEST EXPLANATION FOR OBSERVED BEHAVIORS IS THE BEST CHOICE. BUT FOR COMPLEX SYSTEMS, A *SYSTEMS APPROACH* IS NECESSARY FOR UNDERSTANDING THE OBSERVED PHENOMENA.

CLEARLY SIMPLE EXPLANATIONS ABOUT THE FUNDAMENTAL NATURE IF TIME ARE NOT ADEQUATE, THIS IS WHY SCOTT REALIZED THAT TO UNDERSTAND THE NATURE OF TIME HIS SYSTEMS APPROACH WORKS TO CLARIFY ISSUES ABOUT THE FUNDAMENTAL PHYSICS AND NATURE OF TIME.

►►►►► THE PERCEPTION OF TIME IN THE 'NOW' OF OUR CONSCIOUSNESS:

ALL OUR BODIES SENSES SEND SIGNALS ORIGINATING IN OUR ENVIRONMENT OR OUR BODIES TO OUR BRAIN FOR PROCESSING INTO OUR PERCEPTION OF REALITY CURRENT WITH OUR SENSE OF 'NOW'.

THIS SUBJECTIVE '*NOW*' OF OUR CONSCIOUSNESS IS LOCATED IN THE BRAIN. OUTSIDE THIS REGION OF THE BRAIN INCLUDING OTHER PARTS OF THE BRAIN AND BODY COULD BE THOUGHT OF AS '*NOT-NOW*'.

SINCE THE *NOW* OF CONSCIOUSNESS IS ALL WE CAN EVER EXPERIENCE, IT IS ALSO THE LOCATION OF OUR SENSE OF TIME, SIMULTANEOUS WITH OUR CONSCIOUS THOUGHTS AND IMAGES OF THE 'EXTERNAL' OBSERVED REALITY.

ALL OF THE 'T*IME DELAYED*' INFORMATION COMING AS *SENSE SIGNALS* INTO OUR BRAIN FROM OUR BODIES AND OUR SENSE OBSERVATIONS ORIGINATES IN THE *NOT-NOW UNIVERSE OUTSIDE OUR CONSCIOUSNESS*. THIS IS THE REASON OUR CONSCIOUSNESS COMPOSES AN ONGOING PROGRESSION OF SEQUENTIAL IMAGES OF REALITY IN OUR CURRENT STATE OF NOW THAT ARE *RELICS OF THE 'PAST' CONFIGURATION OF THE NOT-NOW UNIVERSE* SURROUNDING OUR CONSCIOUS BRAIN.

THESE SENSE SIGNALS HAVE *TRAVEL TIME DELAYS* ALONG THE NEURAL PATHWAYS THAT WHEN ADDED TO THE TRAVEL TIMES FROM THE SIGNAL ORIGINS TO SUBSEQUENT DETECTION BY THESE SENSE CELLS LEADING TO A *NET TIME DELAY* TO OUR BRAIN.

THE TOTAL TIME DELAY IS A MEASURE OF FACT THAT WHAT WE PERCEIVE AS 'NOW' IN OUR CONSCIOUSNESS IS REALLY THE 'PAST' *NO MATTER HOW SHORT THE NET DELAY TIMES ARE.*

ALL WE CAN REALLY SENSE ABOUT THE OBSERVABLE WORLD IS A 'PAST CONFIGURATION - NO MATTER HOW '*IMMEDIATE*' IT MAY SEEM. THE PAST OF THE NOT-NOW UNIVERSE IS ALREADY GONE BY THE TIME WE PERCEIVE IT IN OUR CONSCIOUSNESS.

IT IS THE INFORMATION CARRYING SIGNALS FROM THE *NOT-NOW* UNIVERSE THAT IS PROCESSED BY OUR *NOW* USING THE BRAINS T-COMPUTER TO STORE TIME LABELED MEMORIES FOR LATER CONSTRUCTIONS OF OUR *MAPS* OF THE PAST.

MEANWHILE, THE *EXTERNAL OBJECTIVE UNIVERSE* HAS EVOLVED INTO ITS 'PRESENT' CONFIGURATION. THE 'NOW' OF OUR CONSCIOUSNESS IS A RECORD OF THE *NOT-NOW* 'PAST'. OUR SUBJECTIVE NOW IS THE OBJECTIVE PAST OF THE NOT-NOW UNIVERSE.

FORTUNATELY THE EXTERNAL WORLD DOESN'T GENERALLY CHANGE MUCH DURING THE SHORT TIME WE TAKE TO FORMULATE A PICTURE IN OUR CONSCIOUSNESS OF PERCEIVED 'REALITY'. THIS CREATES THE I*LLUSION OF CONTINUITY OF THE OBSERVED WORLD IN OUR MINDS* MUCH LIKE SUCCESSIVE FRAMES IN A MOVIE OR ON A COMPUTER MONITOR.

►►►THEREFORE WE ARE ALWAYS LIVING IN OUR *SUBJECTIVE CONSCIOUS NOW BASED ON THE NOT-NOW PAST STATE OF THE OBJECTIVE 'EXTERNAL' OBSERVABLE UNIVERSE*, EVEN IF THE NOT-NOW PAST ONLY OCCURRED MILLISECONDS AGO.

THE TIME IS 'NOW' AND 'NOW' IS THE TIME!

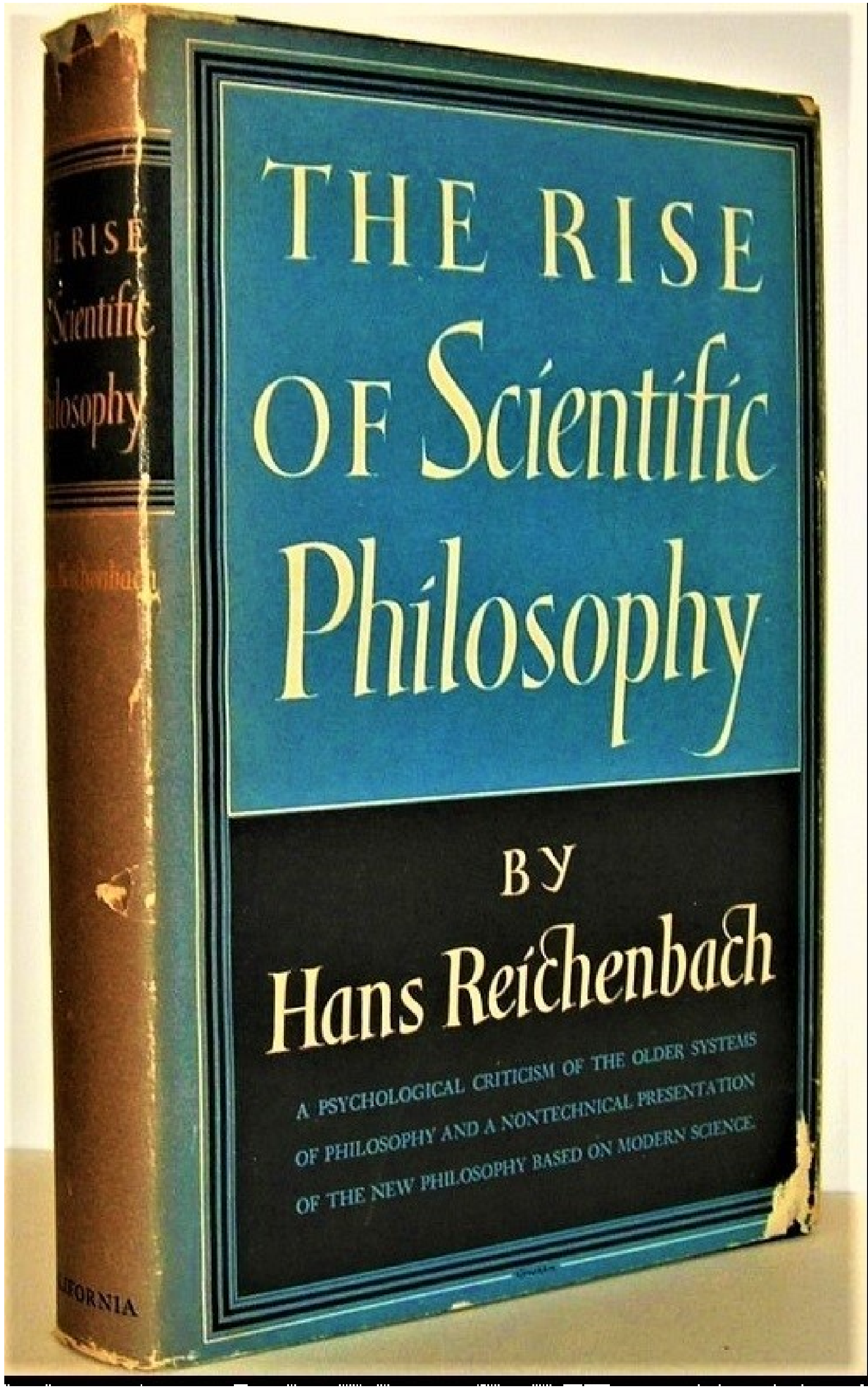
THE SOLUTION TO THE PROBLEM OF TIME [NAMELY *WHAT IS TIME*?] CAN BE FOUND IN FOUND IN SCOTTS SYSTEMS APPROACH WHERE TIME IS A CALCULATED/COMPUTED ARTIFACT DERIVED FROM THE INFORMATION EXTRACTED FROM OBSERVABLE SIGNALS USING A SYSTEM COMPOSED OF THE FOLLOWING:

[1] CAUSAL NETWORKS WHERE SIGNALS [e.g. PHOTONS] ARE LINKS BETWEEN NODES

[2] FEYNMAN CLOCKS, ARE THE SIGNAL/INFORMATION PROCESSING NODES OF THE NETWORK

[3] STANDARD CLOCKS [e.g. ATOMIC CLOCKS] USED AS RELATIVE TIME CALIBRATION/COMPARISON STANDARDS ALLOWING TIME LABELING OF OBSERVED EVENTS, THEN ULTIMATELY CREATING TIME LABELED OR STAMPED MAPS OF REALITY AS MEMORIES *USING*:

[4] THE BRAINS T-COMPUTER. WHERE TIME LABELING OF MEMORIES IS DONE FOLLOWED BY SEQUENTIAL STACKING OF THESE EVENTS INTO THE MEMORY OF THE BRAIN CREATING *CAUSE AND EFFECT ORDERED VISIONS OF REALITY* ACCESSIBLE TO THE '*NOW*' OF OUR CONSCIOUSNESS.



This book represents a new approach to philosophy. It treats philosophy as not a collection of systems, but as a study of problems. It recognizes in traditional philosophical systems the historical function of having asked questions rather than having given solutions. Professor Reichenbach traces the failures of the systems to address psychological causes. Speculative philosophers offered answers at a time when science had not yet provided the means to give true answers. Their search for certainty and for moral directives led them to accept pseudo-solutions. Plato, Descartes, Spinoza, Kant, and many others are cited to illustrate the rationalist reason, unaided by observation, was regarded as a source of knowledge, revealing the physical world and "moral truth." The empiricists could not disprove this thesis, for they could not give a valid account of the mathematical knowledge needed. Mathematical discoveries in the early nineteenth century cleared the way for modern scientific philosophy. Its advance was furthered by discoveries in modern physics, chemistry, biology, and psychology. These findings have made possible a new conception of the universe and of the atom. The work of scientists thus altered philosophy completely and brought into being a philosopher with a new attitude and training. Instead of dictating so-called laws of reason to the scientist, this modern philosopher proceeds by analyzing scientific methods and results. He finds answers to the age-old questions of space, time, causality, and life; of the human observer and the external world. He tells us how to find our way through this world without resorting to unjustifiable beliefs or assuming a supernatural origin for moral standards. Philosophy thus is no longer a battleground of contradictory opinions, but a science discovering truth step by step. Professor Reichenbach, known for his many contributions to logic and the philosophy of science, addresses this book to a wider audience. He writes for those who do not have the leisure or preparation to read in the fields of mathematics, symbolic logic, or physics. Besides showing the principal foundations of the new philosophy, he has been careful to provide the necessary factual background. He has written a philosophical study, not a mere popularization. It contains within its chapters all the necessary scientific material in an understandable form-and, therefore, conveys all the information indispensable to a modern world-view. The late Hans Reichenbach was Professor of Philosophy at the University of California, Los Angeles.

FIRST EDITION 1951: THIS IS STILL RELEVANT AND AN ESSENTIAL MUST READ FOR THOSE INTERESTED IN PHYSICS AND PHILOSOPHY ESPECIALLY STUDENTS CONTEMPLATING CAREERS IN THESE AREAS.